

## WORKING PAPER FIVE:

Initial Draft

# CORRIDOR IDENTIFICATION AND EVALUATION

## Introduction

The Regional Off-Street System (ROSS) Plan, initiated by the Maricopa Association of Governments (MAG), will reveal a region-wide system of off-street pathways for travel by bicyclists and pedestrians. Throughout the MAG region, numerous opportunities for off-street travel by people who walk and bicycle exist along areas such as canal banks, utility line easements and flood control channels. These types of rights-of-way and easements are found throughout Maricopa County and intersect numerous arterial streets where the local daily destinations are typically located. The goal of the ROSS plan is to help make bicycling and walking viable options for daily travel trips using off-street opportunities.

The possibility of developing and expanding travel options for people who bicycle and walk is exciting and offers many benefits to residents in the Valley. These benefits include reduced traffic congestion and air pollution from less local trips made by automobile, and improved health and well-being that comes from regular exercise. While not all trips can be replaced by bicycling and walking, many can, such as walking to work or the bus stop, children riding bicycles to school, errands to the grocery or video store, and after-school sporting activities. The ROSS plan will identify issues associated with multi-use pathways, identify corridors which could be used for pathways, and develop project priorities and design standards. In addition, creating the plan and its priorities will help provide support for federal transportation funding requests.

This working paper, the fifth in a series of working papers presents results of two tasks: Corridor Identification and Corridor Evaluation. Several types of corridors were identified for inclusion in the ROSS plan. These corridors typically have a primary purpose other than non-motorized transportation, and intersect arterial streets where many daily destinations, such as grocery stores and employers, are located. The MAG region is fortunate to have a variety of linear corridors and rights-of-way which can be utilized in an off-street transportation system by bicycles and pedestrians. It's important to note that this plan focuses on potential corridors which form the backbone of a regional off-street system of routes. Other off-street segments will be need to provide additional connections between origins and destinations. The goals and objectives identified in Working Paper Four help to provide guidance on developing other off-street segments. Of particular importance, public lands and existing parkland, such as mountain preserves, can provide vital links in the system. These and other opportunities and constraints should be examined more fully by jurisdictions as they implement the system.

This working paper begins with a description of each of the types of rights-of-way that are included in the plan. A variety of information sources were consulted to identify the corridors, and these are described as well. To assist in implementation, the ownership of each corridor will be identified in

the implementation phase of the planning process. The paper continues by suggesting evaluation criteria for use by MAG members in determining implementation priority.

## **Types of Corridors**

**Canals** - There are many miles of canals winding their way through Maricopa County. Canals are particularly good candidates for an off-street system because they are already considered to be trails that must remain open to the public on at least one side. The canals are also attractive as a water feature. There are examples where housing development has taken advantage of frontage along a canal by providing views and access to the canal right-of-way. Incorporating canals into an off-street system would be very cost effective as many of the basic elements already exist.

**Flood Control Structures and rights-of-way** - Flood control structures and right-of-way also provides excellent opportunities for off-street travel. The Flood Control District of Maricopa County is currently preparing Master Drainage plans for three areas of the county. Part of the planning process includes looking at ways to partner with jurisdictions to make flood control structures multi-use facilities, for activities such as bicycling and walking.

**Utility Easements** - Utility easements included are transmission lines carrying 230 kv or more and gasoline easements for El Paso Natural Gas Company. The larger power line easements were chosen because they have the most potential for use as travel routes since there is likely sufficient right-of-way to develop a comfortable path or trail. The smaller power lines may be appropriate for some trail development, however this would need to be determined on a case by case basis due to right-of-way constraints.

**Railway Corridors** - Both active and inactive railway corridors were identified as potential corridors although inactive rail lines are more suitable for comfortable travel ways by bicyclists and pedestrians. Active and inactive rail lines are distinguished on the Corridor Map. Although in most cases there would not be enough right-of-way to develop a trail system in conjunction with an active rail line, there have been cases where there is sufficient right-of-way to safely accommodate a pathway or multi-use trail. Whether or not sufficient right-of-way exists should be examined in the next level of implementation of this plan.

**Desert Washes and Waterways**- There are several projects either underway or being planned in desert washes and waterways. The Rio Salado and the West Valley Recreation Corridor are two well known examples. These present tremendous opportunities because they will act as fingers reaching out from the primary system outlined in the ROSS plan and provide linkages to a wide variety of local and regional destinations. Developing pedestrian and bicycle routes in these areas will require the cooperation of a variety of jurisdictions, such as cities, towns, and public agencies responsible for water management, such as the Bureau of Reclamation and the Flood Control District of Maricopa County.

**Highway and Freeway Rights-of-Way** - Highway and Freeway rights-of-way are not the best options for an off-street system; however, they can be effectively used to provide vital links where sufficient right-of-way exists or can be obtained. At this time, there is not data available on how much right-of-way along freeway corridors is available for possible use as paths or trails. However, in the next stage of this project, the amount of right-of-way needed to develop a comfortable and user friendly non-motorized travel way.

## **(GRAPHICS AND MAP ILLUSTRATING POTENTIAL CORRIDORS TO FOLLOW)**

### **Ownership**

### **Suggested Evaluation Criteria**

When the scope of work for the ROSS was originally developed, it was envisioned that evaluation criteria would be identified to prioritize corridors for improvements based on the goals and objectives of the plan. Since funding is limited and it is not possible to simultaneously add pathways or trails and appropriate amenities to all of the corridors identified during the Corridor Identification stage of the project, it initially seemed appropriate to evaluate corridors to determine their ability to meet the goals and objectives of the plan. The evaluation criteria can be used to address potential trade-offs between goals and objectives. It was intended that the corridor evaluation would result in a hierarchical system of pathways showing the relative importance of each identified corridor segment to the off-street travel system: primary pathways that are critical to attaining plan goals; secondary segments which complement plan goals; and tertiary segments which contribute to plan goals.

However, based on discussions with the Regional Bicycle Task Force and Pedestrian Working Group, it was determined that eliminating some corridors from the overall plan was premature. The evaluation criteria were difficult to apply to corridor segments, and there was a hesitancy for members of the committee to decide regional priorities based upon information which is continually changing. Furthermore, since the overall goal of the ROSS is to maximize non-motorized travel as a way to improve air quality and relieve congestion, it seemed logical to include as many potential off-street segments in the plan as possible, even if the likelihood of implementation at this point in time is unlikely.

The evaluation criteria provided below provide a framework for MAG member agencies to use in developing project priorities. No weight has been assigned to the evaluation criteria to allow for flexibility when determining priorities. It is hoped that the following list of criteria can be used as a guide in evaluating whether a project will meet the goals and objectives in this off-street system plan. Individual jurisdictions may differ in terms of priorities and issues, which can change over time.

**NOTE: MORE DESCRIPTION WILL BE ADDED TO THE EVALUATION CRITERIA TO EXPLAIN THEIR IMPORTANCE TO BICYCLISTS AND PEDESTRIANS.**

**Connects Origins and Destinations** - This relates to the goal of connectivity. The purpose of providing an off-street system of transportation is to connect pedestrian and bicycle trip origins to destinations. If these are not linked, the system will not serve its intended function. This is the one criteria that must be present for any project. Either the project links the two or over the long-term will link an origin and destination.

**Connects to the On-street system** - Again connectivity is important. There are as where the on-street system can provide links to destinations in an appropriate and safe way. In order to further increase the potential for people to use and access the off-street system, it should be linked to the on-street system where possible.

**Fills a Gap** - There are existing off-street and on-street routes in place now with gaps. Projects that were not continued perhaps because they crossed municipal boundaries. Municipalities need to maintain connections to other communities in a off-street system in a similar fashion as an on-street system.

**Sufficient Right-of-way** - This relates to implementation. Whether or not sufficient right-of-way exists can be a factor in when or whether or not a segment of the system is implemented. Depending on the circumstances this may be overcome either by design or by acquiring the additional right-of-way to make the route work.

**Multi-user Appeal** - The more people that can use and support the system the better it is. The primary groups being targeted by this plan are bicyclists and pedestrians. The right-of-way should be able to accommodate at a minimum these two groups.

**Multi-modal Connections** - The intent is that this Off-street transportation system become a part of the overall transportation system for the MAG region. Connecting to other modes of transportation will be vital to making the system work. It is not uncommon for people to use at least two modes of transportation in their daily trip to work. The more opportunities that exist for people the more they will take advantage of a system. Particularly in the beginning as segments are added one or two at a time. Maintaining connectivity and linkages to other modes of transportation will be critical.

**Does Not Require Significant Retrofitting** - This will be mainly an economic advantage. The less retrofitting required, the more affordable the project will be to construct. Also, less retrofitting will speed up the implementation process.

**Improves Safety** - Areas where safety is a concern for bicyclists and pedestrians in the existing system should be considered as priority areas for providing an off-street alternative.

**In a Mixed-use Area** - Areas with commercial, residential and institutional uses combined present the best opportunities for getting people to use alternative modes of transportation. Distance is probably the greatest factor in peoples decision regarding transportation modes.

**Potential for Cost Sharing** - There may be opportunities to share the cost of construction with partners such as developers, the flood control district or even other jurisdictions. The more funding opportunities that can be identified for a project the more likely it is to be implemented.

**Cooperative Property Owners** - Knowing that either the adjacent property owners, the agency controlling the right-of-way or both are going to cooperate in the development of a segment increases a projects chances of success and again can speed up the implementation process.